REMARKS

Claims 1, 4 and 7 are amended. Claims 2, 3, 5, 8, 9 and 17-61 are canceled. Claims 62-72 are added. Claims 1, 4, 6, 7, 10 and 62-72 are in the application for consideration.

The subject matter of claim 2 has been written by amendment into claim 1, and claim 2 has been cancelled. Claim 2 stands rejected as being anticipated by U.S. Patent No. 6,410,938 to Xiang. Applicant disagrees and requests reconsideration.

Pertinent language in amended independent claim 1 is that the insulator layer comprises a silicon nitride comprising region that is received intermediate the silicon dioxide comprising layer and the source/drain regions. Such silicon nitride comprising region is stated to be running along only a portion of the channel region between the source/drain regions. By way of example only, Applicant's Fig. 7 species election shows the silicon nitride comprising region running along only a portion of the channel region between the source/drain regions. Fig. 8 to the unelected species also shows such a construction. Accordingly, Applicant's amended independent claim 1 is generic to the alleged species of Fig. 7 (elected) and the alleged species of Fig. 8 (unelected). The Examiner is of the opinion that such is disclosed by Xiang at col.3, lns.45-55 and col.2, lns.58-60. However, that is not what these portions of Xiang, or any other portions of Xiang, disclose.

Specifically, it is acknowledged that Xiang states its nitrided semiconductor oxide layer 60 need not be a single continuous layer, but

may include a number of discontinuous portions. However, the only examples which Xiang provides for such discontinuous portions are, (a) that such be discontinuous under Xiang isolation trenches 52, 54 and 56, or (b) that there may be discontinuities under one or more of the active regions due to masking PMOS active semiconductor regions prior to the implanting of nitrogen material. Accordingly, there is absolutely no teaching or suggestion by Xiang that its nitrided portions are not continuous along the entirety of the channel region. The alleged teaching of discontinuity beneath the trench isolation regions is still that the nitrided region be continuous over the semiconductor channel region. Likewise, the statement and teaching regarding discontinuity under one or more active regions due to PMOS masking would, accordingly, place absolutely no nitrided region underneath the channel region of the PMOS substrates and, with it following to a person of skill in the art, that the unmasked regions would result in nitridation underneath the entirety of the channel regions in the NMOS active semiconductor regions. Therefore, there is no disclosure or suggestion of a silicon comprising region running along only a portion of a channel region between a pair of source/drain regions. Accordingly, the Examiner's anticipation rejection of claim 2, now independent claim 1, is seen to be in error, and withdrawal of this rejection is warranted. Action to that end is requested.

The subject matter of dependent claim 8 has been rewritten in independent form into independent claim 7, and claim 8 has been cancelled.

Claim 8 stood rejected as being obvious over a combination of the '938 patent to Xiang, referred to above, in combination with U.S. Patent No. 5,021,843 to Ohmi. Applicant disagrees and requests reconsideration.

Amended claim 7, like amended independent claim 1, recites that the silicon nitride comprising region runs along only a portion of the channel region between the source/drain regions. Accordingly, Xiang is inapplicable to claim 7 for the same reasons argued above with respect to its inapplicability to claim 1. Ohmi is equally lacking in this regard. Specifically, the only teaching in Ohmi is that its silicon nitride region runs along an entirety, and thereby not along only a portion, of the channel region between the source/drain regions. As each of Ohmi and Xiang are lacking in this regard, Applicant's independent claim 7 recites something which is not taught by either of these references. Therefore, the combination of such references does not teach that which Applicant recites in independent claim 7. Accordingly, independent claim 7 should be allowed, and action to that end is requested.

Dependent claims 62-72 are added. Such are clearly supported by Applicant's application as-filed, such that no new matter is introduced. Entry of these claims is requested. The undersigned acknowledges that claims 64, 67, 68, 70 and 72 do not read upon the elected species. Nevertheless, such claims ultimately depend from claims which are generic to the species of Fig. 7 and the species of Fig. 8, and accordingly, such should be allowed.

With respect to the added claims, dependent claims 63 and 69 recite that the portion of the silicon nitride comprising region is discontinuous relative to the channel region. Such is clearly supported and shown in Applicant's Fig. 7 wherein the stated portion is not continuous across the channel region. Neither of the cited references suggest such.

With respect to added dependent claims 65 and 71, such recite that the channel region comprises a central region laterally centered between the source/drain regions, with a portion of the silicon nitride comprising region being laterally spaced from the central region. Such are also clearly supported by Applicant's elected species of Fig. 7, and not suggested by either of the references of record. Accordingly, such claims should be allowed.

Each of Applicant's dependent claims in this application should be allowed as depending from allowable base claims, and for their own recited features which are neither shown nor suggested in the cited art. Action to that end is requested.

This application is believed to be in immediate condition for allowance. The undersigned respectfully requests a telephone interview with the Examiner in the event the next action is to be anything other than a Notice of Allowance

Respectfully submitted,

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By: _____
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